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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,535	03/24/2004	Francis J. Kelley	02009US	6145
61511 7590 05/02/2008 ROHM AND HAAS ELECTRONIC MATERIALS CMP HOLDINGS, INC. 451 BELLEVUE ROAD NEWARK, DE 19713				
EXAMINER				
CHEN, KIN CHAN				
ART UNIT		PAPER NUMBER		
1792				
MAIL DATE		DELIVERY MODE		
05/02/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/809,535

**Applicant(s)**

KELLEY ET AL.

**Examiner**

Kin-Chan Chen

**Art Unit**

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "**the** carboxy methyl cellulose" in line 4. There is insufficient antecedent basis for this limitation in the claim.

In claim 1, Applicant recites modify cellulose, also "carboxy methyl cellulose", however, applicant does not specify the weight percent of the carboxy methyl cellulose. Therefore, it is vague and indefinite. Furthermore, it is unclear whether they are two separate materials, or applicant merely defines one specific element (carboxy methyl cellulose) in the Markush group.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Goldberg et al. (US 2005/0136671) or Thomas et al. (US 2005/0104048), insofar assuming that applicant defines one specific element (carboxy methyl cellulose) in the Markush group when that carboxy methyl cellulose is chosen, however, **it is not required** that the specific element (carboxy methyl cellulose) be chosen from the Markush group according to instant claim 2.

Goldberg (abstract; [0022] [0023]; [0014]-[0016]) or Thomas (abstract; [0024] [0025]; [0016]-[0018]) discloses that an aqueous composition useful for polishing copper on a semiconductor wafer may comprise by weight percent up to 25 oxidizer, 0.05 to 1 inhibitor for a nonferrous metal, 0.01 to 5 complexing agent for the nonferrous metal, 0.01 to 5 modified cellulose, and balance water at a pH of 2 to 5, wherein said composition is abrasive free and free of polyacrylic acids. As to dependent claims 2 and 3, see Goldberg ([0020]) or Thomas ([0022]).

### ***Claim Rejections - 35 USC § 103***

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al. (US 2005/0136671) or Thomas et al. (US 2005/0104048).

Goldberg (abstract; [0022] [0023]; [0014]-[0016]) or Thomas (abstract; [0024] [0025]; [0016]-[0018]) discloses that an aqueous composition useful for polishing copper

on a semiconductor wafer may comprise by weight percent up to 25 oxidizer, 0.05 to 1 inhibitor for a nonferrous metal, 0.01 to 5 complexing agent for the nonferrous metal. 0.01 to 5 modified cellulose, and balance water at a pH of 2 to 5, wherein said composition is abrasive free and free of polyacrylic acids. Goldberg ( [0020]) or Thomas ([0022]) discloses using various modified cellulose.

Dependant claim 4 differs from the prior art by specifying various degree of substitution and molecular weight of carboxy methyl cellulose. Because same are merely a matter of choices of design depending on the product requirements, in absence of any unexpected result which is different in kind and not merely in degree from the result of the prior art, it would be obvious to one skilled in the art to use various a degree of substitution and molecular weight of carboxy methyl cellulose in order to accommodate the specific product and meet the product requirement.

### ***Response to Arguments***

5. Applicant has argued that Goldberg or Thomas does not teach molecular weight of carboxy methyl cellulose. It is not persuasive. As has been stated in the office action, applicant defines one specific element (carboxy methyl cellulose) in the Markush group when that carboxy methyl cellulose is chosen, however, **it is not required** that the specific element (carboxy methyl cellulose) be chosen from the Markush group. Further more, There is no statement that the common ownership was "at the time the invention **was made**," see MPEP § 706.02.

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kin-Chan Chen whose telephone number is (571) 272-1461. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

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applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kin-Chan Chen/  
Primary Examiner, Art Unit 1792

April 30, 2008